

Patent Claims

1. Method for cleaning the screen stencil (2) of a screen printing device, wherein a paper web (5) is brought beneath the screen stencil for an intermediate printing and is printed by a squeegee running over it, characterized in that before performing the intermediate printing, the bottom of the screen stencil (2) is wetted with a cleaning agent.

2. Method as claimed in Claim 1, characterized in that the wetting is performed by a rotating cylinder (9) or brush that is immersed in cleaning agent and brought in contact with the bottom of the screen stencil (2).

3. Intermediate printing device for a screen printing machine for performing the method as claimed in Claim 1, having a paper web (5) and an intermediate impression cylinder (7) which can be inserted beneath the screen stencil (2) for the purpose of cleaning same, characterized by a rotating body (9) which is provided for the intermediate printing device (1) and is mounted across the direction of movement (8) of the intermediate printing device (1), said rotating body being coatable with a cleaning agent and guidable along and in contact with the bottom of the screen stencil (2) before the intermediate printing.

4. Intermediate printing device as claimed in Claim 3, characterized in that the rotating body is a cylinder (9) which is immersed in a cleaning agent bath.

5. Intermediate printing device as claimed in Claim 4, characterized in that the cleaning agent is accommodated in a container (10) which surrounds the cylinder (9) at the bottom and is adapted to the shape of the cylinder.

6. Intermediate printing device as claimed in Claim 5, characterized in that the cleaning agent is supplied to the container (10) in circulation.

7. Intermediate printing device as claimed in Claim 4, characterized in that the surface of the cylinder (9) is roughened.

8. Intermediate printing device as claimed in Claim 4, characterized in that the cylinder (9) is provided with a pinion gear (16) arranged laterally and engaging in a toothed rod (3) which is fixedly arranged on the master frame of the screen printing machine next to the screen stencil (2).

9. Intermediate printing device as claimed in Claim 3, characterized in that the rotating body (9) is designed so that it can be raised and lowered.

10. Intermediate printing device as claimed in Claim 3, characterized in that a control device is provided for determining the cleaning cycle.

11. Intermediate printing device as claimed in Claim 4, characterized in that the cylinder (9) and the container (10) assigned to it for the cleaning agent are arranged on the end of an intermediate impression cylinder (7) which faces the screen stencil (2), said cylinder being mounted displaceably in the direction of movement of the squeegee.

12. Intermediate printing device as claimed in Claim 11, characterized in that the cylinder (9) is mounted with the container (10) on a pivot lever pair (13).

13. Intermediate printing device as claimed in Claims 8 and 12, characterized in that the pivot lever pair (13) can be acted upon by pneumatic cylinders (15) so that the pinion gear (16) engages in the toothed rod (3).

14. Intermediate printing device as claimed in Claim 3, characterized in that the intermediate impression cylinder (7) is provided with a paper web (5) carried by cylinders and arranged so that it can be displaced about the length of the screen stencil (2).

15. Intermediate printing device as claimed in Claim 14, characterized in that the paper web (5) is designed as a continuous loop to receive ink and cleaning agent.

16. Intermediate printing device as claimed in Claim 15, characterized in that the continuous loop material is freed of ink with cleaning agent in circulation and is available again for reprinting when dry.

17. Intermediate printing device as claimed in Claim 16, characterized in that the cleaning of the continuous loop material is accomplished with cleaning agent that is carried in circulation and using brushes, stripping squeegees and spray nozzles.

18. Intermediate printing device as claimed in Claim 3, characterized in that the intermediate printing is performed for cleaning the screen

stencil with a plate cylinder rolling beneath the screen and cleaned automatically according to Claim 17.